ABSTRACT OF THE DISCLOSURE

A thin film magnetic memory device includes: TMR elements provided at a predetermined distance away from each other on a main surface of a silicon substrate so as to operate as memory elements; a first digit line for applying a magnetic field to TMR element, extending in one direction so as to intersect TMR element; a second digit line for applying a magnetic field to TMR element, extending parallel to the first digit line so as to intersect TMR element; and a magnetic film provided so as to fill in the space between the first digit line and the second digit line and so as to bring into contact with the first and second digit lines. The present invention provides a thin film magnetic memory device wherein crosstalk can be prevented from generating between adjacent memory cells and wherein wire resistance does not increase.